



ROSEMONT COPPER REDEFINING MINING.

www.rosemontcopper.com

5

memberId

5

December 13, 2013

memberId

四

一一

Colonel 웨인 김 웨인 콜론el

District Engineer Los Angeles District

U.S. 順序Army 順序Corps 順序Engineers

P.O. #nBox #n5B2711

Los Angeles 125 웹사이트

100

Re: PPEPRA Evaluation of Rosemont Mine Compensation Mitigation

11

Dear Colonel www.colonelkenneth.com

5

Rosemont Copper Company (Rosemont) has developed a copper mine in a manner that disregards new federal regulations required for environmental standards under the various environmental rules, regulations and appropriate standards. It has not followed the required environmental impact statement process and has not consulted with the public or the affected tribes. The company has taken actions that are inappropriate and incorrect.

Attached is this Response to the initial comment regarding the evaluation by the Environmental Protection Agency (EPA) of the Rosemont Mine Project impacts to the Aquatic Ecosystem and proposed compensatory mitigation at the Rosemont Mine. The EPA evaluation concerns the 404 permit that Rosemont sought to obtain from the Corps of Engineers (CoE) to allow a single functioning inspection with the proposed copper mine and processing facility. Arizona EPA evaluation concludes that Rosemont's "proposed mitigation [is] grossly inadequate to compensate for the secondary effects" of Rosemont's proposed discharge, which mitigation is required; (2) the mischaracterization of many of the proposed mitigation measures as "mitigation" when they are not, and the characterization of the proposed conclusion as an error. When the effects of the mitigation proposed conclusion are finalized, the CoE will base its decision on whether Rosemont has developed a proposal that will meet the requirements for compensatory mitigation for the unavoidable impacts to the aquatic ecosystem of the Rosemont Mine. The States

The 웹 토론방 웹 토의 웹 the 웹 EPA 웹 Evaluation 웹 his 웹 redivided 웹 him into 웹 several 웹 sections

- I. Introduction; 웹□η
 - II. A 웹□η discussion of what constitutes secondary impacts, the 웹□η discharge
 - III. A 웹□η discussion of how the A 웹□η mischaracterizes impacts, including what those are 웹□η not 웹□η part of the 웹□η 404 웹□η regulatory process; 웹□η
 - IV. Rosemont's 웹□η 404 웹□η mitigation package and 웹□η proposal
 - V. Conclusion. 웹□η

5

PO Box 35130 Tucson, AZ 85740-5130

Office: (520) 495-3500

Fax: (520) 495-3540

EPA의 Evaluation of the Rosemont Mine Compensation Mitigation
 December 2013

켓□η

I. INTRODUCTION

In connection with the Rosemont Mine Project, Rosemont Copper has applied to the Corps of Engineers for a permit to construct a tailings storage facility in the spring area impacted by the Project. The first and second phases of the Project covers approximately 400 acres. The Project filled the valley where the Project's tailings facility and waste storage facility will occur. Project components include open-pit, utility roads, more than one processing facilities.

This Project has undergone process of public comment and review under the National Environmental Policy Act (NEPA), which requires environmental impact statement (EIS). The EIS includes the Project can meet environmental requirements and subject to appropriate conditions and mitigation measures. The EIS was received for approval for all permits required by the state of Arizona water management, and surface and groundwater protection, including api reclamation. The EIS stamp in Water Quality Area 401 approvals have yet to be issued.

To obtain a 404 permit, Rosemont must have an adequate plan in place impacts to instream waters that may result from the project. The required by 404(b)(1) Guidelines (and the Corps' 404(b)(1) Subpart) include a conceptual proposal that would include principal features:

- An environmental fee (ILF) for the project at Pantano Dam, made possible by holding in the Cienega Creek Natural Resources Plan, accompanied annually (AFA) of senior surface water rights that are held in trust.
- A responsible (or potential ILF) project owner who comes with its own 590 AFA senior surface water right and current restoration and enhancement.
- Conservation parcels within the Davidson Canyon watershed along the Orange and Muleberry Canyons.

The November 2013 EPA Evaluation concludes that the proposed mitigation is grossly inadequate to compensate for the impacts, "The EPA Evaluation recommended that Rosemont's 404 permit application is based on a misapplication. As discussed below, EPA's evaluation's conclusion is based on a misapplication or they pertain to the identification of the "secondary effects" for the mischaracterization of the mining operation's evaluation. It also mischaracterizes and discounts the mitigation proposed in the conclusions of the EPA Evaluation. Therefore, there is error."

When the "secondary effects" are identified and characterized, Rosemont's mitigation proposal is given once finalized, it will be more than adequate to compensate for the unavoidable impacts to waters.

¹ The Rosemont Project is described in the summary, Table ES1. Alternative comparisons Table: elements, page xxiv.

EPA의 Evaluation of the Rosemont Mine Compensation Mitigation
 December 2012

켐□η

켐□η 켐□η

II. THE EVALUATION INCORRECTLY IDENTIFIES THE IMPACTS AND COMPENSATORY MITIGATION IS REQUIRED

As 켐□ηdiscussed 켐□ηin the section above, the Project will directly impact 40 acres of ephemeral washes and streams. Most of these will direct impacts will result from the tailings facilities (Banded Wasp Canyon, which is located downstream, significant ephemeral washes). The impacts will include individual impacts for the project areas and associated utilities, land and associated infrastructure. The impacts will include five springs that will be directly impacted by the Project (Rosemont Springs) which occurs in its natural state (with flows of less than even modest type vegetation). Of the remaining features identified (Unnamed Spring, Barren Canyon, etc.) algorithm developed for the Project estimates downstream loss of waters. An additional factor represents the potential for gradual diminishment downstream. The primary impacts simply relate to damage to areas that will remain.

The Evaluation finds that Rosemont's proposed mitigation plan fails because it fails to compensate all of the "secondary effects" characterized by the Region's Lands Office, which believe primary authorizes EPA. Evaluation. The Evaluation focuses, in particular, on the bedrock formations that surround those that could affect surface flows and some of the "secondary effects" too broadly. It assumes the "secondary effects" of proposed discharge from States' rare potential impacts from secondary effects from the Project has where the Guidelines.

"Secondary effects" are defined by the Guidelines as the "effects associated with discharge of dredged or fill material." The 40 CFR 230.11(h)(1) corrects of the proposed discharge is obviously beyond the scope of evaluation. Those effects. Without such a determination, it is impossible to mitigate those effects. It is commensurate with the amount and type of impact discharge. The 40 CFR 230.11(c) Lands Office appears to ignore the fact that what is being explained by the Evaluation is how the impacts of the Project to secondary mitigation. This is within the Guidelines second part of the definition.

To insure that the concept of "secondary effects" is applied properly, those authorized to regulate those affected by the discharge have three specific examples of individual effects. First, an example is fluctuating water levels impoundment and downstream associated with the operation of a septic tank and leaching into surface runoff from residential or commercial

² The Volume Appendix A, U.S. Army Corps of Engineers' Section 404 page 38.

EPA's Evaluation of Rosemont Mine Compensation Mitigation
 December 2013

편□나

example 편□나 is 편□나 “leachate 편□나 and 편□나 runoff 편□나 from 편□나 sanitary 편□나 landfill 편□나 located 편□나 in these 편□나 examples 편□나 that 편□나 to 편□나 qualify 편□나 as 편□나 편□나 “secondary 편□나 effect” 편□나 of 편□나 result 편□나 of 편□나 water 편□나 moving 편□나 across 편□나 polluted 편□나 ground 편□나 or 편□나 feature been 편□나 created 편□나 by 편□나 the 편□나 discharge. 편□나 편□나 in 편□나 the 편□나 first 편□나 example, 편□나 the 편□나 dis affects 편□나 the 편□나 water 편□나 levels 편□나 both 편□나 in 편□나 the 편□나 impoundment 편□나 and 편□나 downstream; 편□나 discharge 편□나 these 편□나 dry 편□나 land 편□나 on 편□나 which 편□나 a 편□나 residential 편□나 or 편□나 commercial 편□나 development 편□나 on 편□나 the 편□나 land 편□나 then 편□나 results 편□나 in 편□나 leaching 편□나 into 편□나 the 편□나 ground placed 편□나 in 편□나 the 편□나 landfill 편□나 and 편□나 surface 편□나 runoff 편□나 the 편□나 distance 편□나 creates 편□나 gas 편□나 landfill, 편□나 and 편□나 the 편□나 storm 편□나 water 편□나 that 편□나 falls 편□나 on 편□나 the 편□나 landfill 편□나 then 편□나 up passes 편□나 through 편□나 the 편□나 landfill 편□나 and 편□나 off 편□나 from 편□나 its 편□나 surface. 편□나 편□나

So 편□나 there 편□나 are 편□나 examples 편□나 of 편□나 understanding 편□나 about 편□나 the 편□나 secondary 편□나 effects 편□나 examples, 편□나 examples 편□나 followed 편□나 by 편□나 an 편□나 explicit 편□나 statement 편□나 that 편□나 “activities 편□나 to 편□나 be 편□나 conducted 편□나 of 편□나 dredged 편□나 or 편□나 fill 편□나 material 편□나 in 편□나 waters 편□나 of 편□나 secondary 편□나 United States 편□나 within 편□나 waters 편□나 which 편□나 considered 편□나 in 편□나 evaluating 편□나 the 편□나 impact 편□나 of 편□나 creating 편□나 statement 편□나 is 편□나 specific 편□나 to 편□나 activities 편□나 conducted 편□나 on 편□나 a 편□나 structure 편□나 or 편□나 facility. Significantly, 편□나 the 편□나 Guidelines 편□나 describes 편□나 impacts 편□나 that 편□나 affect 편□나 subject 편□나 to 편□나 section 편□나 40 jurisdiction 편□나 that 편□나 may 편□나 have 편□나 been 편□나 facilitated 편□나 by 편□나 activities 편□나 that 편□나 last take 편□나 place 편□나 elsewhere 편□나 “but 편□나 for” 편□나 the 편□나 project 편□나 that 편□나 fast 편□나 land.

Unfortunately, 편□나 activities 편□나 noted 편□나 in 편□나 the 편□나 404 편□나 application 편□나 were 편□나 not 편□나 included 편□나 in its 편□나 valuation. 편□나 rather, 편□나 the 편□나 secondary 편□나 effects 편□나 of 편□나 Rosemont’s 편□나 proposed 편□나 mine 편□나 discharge 편□나 the 편□나 effects 편□나 on 편□나 aquatic 편□나 potential 편□나 effects 편□나 in 편□나 mind 편□나 groundwater 편□나 levels resulting 편□나 in 편□나 project 편□나 activity 편□나 anywhere 편□나 within 편□나 the 편□나 Project 편□나 area, 편□나 rather, 편□나 effects 편□나 of 편□나 water 편□나 related 편□나 activities 편□나 conducted 편□나 on 편□나 the 편□나 “fast 편□나 sand” 편□나 created 편□나 the 편□나 effects 편□나 in 편□나 “waters 편□나 of 편□나 the 편□나 hills” 편□나 wetlands 편□나 rock, 편□나 hand, 편□나 changing 편□나 facilities Wetlands 편□나 편□나 simply 편□나 because 편□나 Rosemont’s 편□나 proposed 편□나 discharge 편□나 is 편□나 part that 편□나 will 편□나 be 편□나 facilitated 편□나 by 편□나 perhaps 편□나 more 편□나 effective 편□나 than 편□나 any other 편□나 aquatic 편□나 resources 편□나 are 편□나 “secondary 편□나 effects” 편□나 of 편□나 the 편□나 discharge 편□나 and 편□나 therefor overreaching 편□나 contrary 편□나 to 편□나 the 편□나 Guidelines, 편□나 and 편□나 then 편□나 explicit 편□나 guidance 편□나 is.

In 편□나 describing 편□나 “secondary 편□나 effects” 편□나 it 편□나 claims 편□나 must 편□나 be 편□나 eliminated 편□나 the 편□나 repeated 편□나 referred 편□나 “project 편□나 impacts” 편□나 or 편□나 “impacts” 편□나 in 편□나 evaluation 편□나 page 5, 편□나 8, 편□나 an example. 편□나 in 편□나 Wetlands 편□나 Office 편□나 notes 편□나 the 편□나 “secondary 편□나 effects” 편□나 itself 편□나 the 편□나 Additional 편□나 page 1A’s 편□나 “impacts” 편□나 hands 편□나 office 편□나 previously 편□나 concluded 편□나 the 편□나 “project 편□나 does” 편□나 not 편□나 comply 편□나 with 편□나... 편□나 the 편□나 Guidelines 편□나 does not 편□나 this, 편□나 has 편□나 the 편□나 issue 편□나 with 편□나 the 편□나 “secondary 편□나 effects” 편□나 by 편□나 EPA’s 편□나 General 편□나 Counsel. 편□나 편□나 The 편□나 Guidelines 편□나 response 편□나 to 편□나 question 편□나 that 편□나 was 편□나 asked 편□나 by 편□나 the 편□나 Assistant 편□나 Administrator 편□나 preparing 편□나 the 편□나 Guidelines. 편□나 편□나 The 편□나 Assistant 편□나 Administrator 편□나 asked, 편□나 “Must 편□나 impacts?” 편□나 편□나 In 편□나 response, 편□나 the 편□나 General 편□나 Counsel 편□나 stated:

By 편□나 “secondary 편□나 impacts,” 편□나 편□나 am 편□나 assuming 편□나 that 편□나 you 편□나 mean 편□나 reasonably 편□나

EPA□□□□□Evaluation□□□of□□□Rosemont□□□Mine□□□Compensatory□□□Mitigation
 December 2□□□□□20□□□

편□η

discharge 편□ηitself 편□ηthat 편□ηoccur 편□ηaway 편□ηfrom 편□ηthe 편□ηimmediate 편□ηsite 편□ηof 편□ηimpacts 편□ηor 편□ηimpacts 편□ηfrom 편□ηthe 편□ηaltered 편□ηcirculation 편□ηas 편□ηthe 편□ηwater 편□ηto 편□ηthe 편□ηdischarged 편□ηmaterial. 편□ηSuch 편□ηsecondary 편□ηimpacts 편□ηmust 편□ηbe 편□ηcon 편□η

When 편□ηone 편□ηmoves 편□ηbeyond 편□ηsecondary 편□ηimpacts, 편□ηas 편□ηdefined 편□ηabove, 편□ηsubsequent 편□ηoperation 편□ηof 편□ηa 편□ηproject 편□ηor 편□ηby 편□ηa 편□ηso-called 편□ηdevelopment 편□η, 편□ηdifficult. 편□ηWhile 편□ηit 편□ηis 편□ηhard 편□ηto 편□ηanswer 편□ηin 편□ηthe 편□ηabstract, 편□ηit is considered 편□ηwould 편□ηappear 편□ηto 편□ηdepend 편□ηon 편□ηthe 편□ηdirectness 편□ηof 편□ηthe 편□ηpredictability 편□ηof 편□ηthe 편□ηimpacts, 편□ηinterpretation 편□ηof 편□ηthe 편□ηexample, 편□ηwhere discharged 편□ηto 편□ηbuild 편□ηa 편□ηdam 편□ηon 편□ηwater 편□ηflow, 편□ηthe 편□ηperiod in 편□ηevaluating 편□ηthe 편□ηimpacts 편□ηof 편□ηthe 편□ηfill, 편□ηmay 편□ηreasonably 편□ηtake 편□ηwill 편□ηbe 편□ηmanipulated 편□ηin 편□ηhand, 편□ηadding 편□ηa 편□ηfactory 편□ηfor 편□ηan 편□ηupland 편□ηinvolves 편□ηsome 편□ηfill, 편□ηthe 편□ηwater 편□ηquality 편□ηof 편□ηthe 편□ηfactory 편□ηguidelines, 편□ηeven 편□ηif 편□ηthey 편□ηare, 편□ηin 편□ηa 편□ηsense, 편□ηa 편□η“result” 편□ηof 편□η

Like 편□ηthe 편□ηGuidelines 편□ηthe 편□ηGeneral 편□ηCounsel 편□ηfor 편□ηthe 편□ηpossibility 편□ηthat 편□ηsome 편□ηdownstream structure 편□ηor 편□ηfeature 편□ηcreated 편□ηby 편□ηa 편□ηdischarge 편□ηare 편□ηproperly 편□ηconsidered 편□ηdischarge. 편□ηIn 편□ηthe 편□ηguidance, 편□ηas 편□ηin 편□ηthe 편□ηGuidelines 편□ηexample, 편□ηthe 편□ηGeneral 편□ηCounsel 편□ηconcludes 편□ηthat 편□η“the 편□ηpermitting 편□ηauthority 편□ηmay 편□ηreasonably 편□ηtake 편□ηinto 편□ηacc will 편□ηbe 편□ηmanipulated 편□ηin 편□ηthe 편□ηfill, 편□ηand 편□ηthe 편□ηeffects 편□ηof 편□ηthe 편□ηmanip be 편□ηconsidered 편□ηa 편□η“secondary 편□ηeffect” 편□ηof 편□ηthe 편□ηdischarge. 편□ηOn 편□ηthe 편□ηexample 편□ηof 편□ηa 편□ηdischarge 편□ηthat 편□ηis 편□ηleading 편□ηto 편□ηconstruction 편□ηfailure” 편□ηillustrate 편□ηeffects 편□ηthat 편□ηwould 편□ηnot 편□ηproperly 편□ηbe 편□ηconsidered 편□η“secondary 편□ηeff apparent 편□ηthe 편□ηGeneral 편□ηCounsel 편□ηreasons 편□ηthat 편□ηbecause 편□ηthe 편□ηupland 편□ηfactory the 편□ηdischarge 편□ηitself 편□ηthe 편□ηwater 편□ηimpacts 편□ηof 편□ηthe 편□ηfactory 편□ηoutside 편□ηeven 편□ηif 편□ηthey 편□ηare, 편□ηin 편□ηa 편□ηsense, 편□ηenough 편□ηfactory 편□ηnot 편□ηpermit 편□ηis 편□ηnot 편□ηissued. 편□η

This 편□ηlatter 편□ηexample 편□ηanalogous 편□ηsituation 편□ηpresented 편□ηby 편□ηRosemont’s 편□ηproposal. To 편□ηfacilitate 편□ηthe 편□ηoperation 편□ηof 편□ηa 편□ηdischarge 편□ηthe 편□η“upland 편□ηfactory” 편□ηin 편□ηexample, 편□ηRosemont 편□ηneeds 편□ηto 편□ηthe 편□ηGeneral 편□ηCounsel’s 편□ηexample, 편□ηand 편□ηthe 편□ηconstruction “some 편□ηfill.” 편□ηWhile 편□ηthe 편□ηwater 편□ηquality 편□ηimpacts 편□ηof 편□ηthe 편□ηProject 편□ηa 편□ηsense 편□ηof 편□ηthe 편□ηfill, ” 편□ηin 편□ηthat 편□ηthey 편□ηmight 편□ηnot 편□ηtake 편□ηplace 편□η[nonetheless] 편□ηoutside 편□ηthe 편□ηscope 편□ηbecause 편□ηthe 편□ηimpacts 편□ηare 편□ηnot 편□ηeffects 편□ηitself; 편□ηthey 편□ηare 편□ηthe 편□ηeffects 편□ηlike 편□ηRd 404 편□ηcase operation 편□ηwhich 편□ηwhich 편□η

Based 편□ηon 편□ηthe 편□ηexamples 편□ηgiven 편□ηin 편□ηthe 편□ηGuidelines 편□ηand 편□ηin 편□ηthe 편□ηaquatic 편□ηresources 편□ηto 편□ηbe 편□ηconsidered 편□ηthe 편□η“discharge effect” 편□ηthe 편□ηeffect result 편□ηof 편□ηwater 편□ηinteracting 편□ηwith 편□ηthe 편□ηstructure 편□ηfeature 편□ηmust 편□ηbe 편□ηresult 편□ηof 편□ηwater 편□ηrunning 편□ηacross 편□ηor 편□ηthrough, 편□ηor 편□ηbeing 편□ηmanipulated 편□ηcreated 편□ηby 편□ηthe 편□ηdischarge. 편□ηThis 편□ηis 편□ηwhat 편□ηis 편□ηmeant 편□ηby 편□ηthe 편□η“effects” 편□ηthat 편□ηare 편□ηassociated 편□ηwith 편□ηa 편□ηdischarge 편□ηof 편□ηdredged 편□ηor 편□ηfill 편□ηthe 편□ηactual 편□ηplacement 편□ηof 편□ηthe 편□η“discharge effect” 편□ηwhich 편□ηoverlooked 편□ηor 편□ηdismissed 편□ηregulatory 편□ηdefinition 편□ηand 편□ηonly 편□ηthat 편□ηthe 편□ηdischarge 편□ηwould 편□η“re

EPA의 Evaluation of Rosemont Mine Compensation Mitigation
 December 2013

캠□η

loss, conversion and functional degradation of aquatic and terrestrial areas”¹ (see EPA’s Evaluation, ¶ 104). The result of this analysis is that the limits of the 404 valuation stating that Rosemont’s mitigation is inadequate.

캠□η

III. THE EVALUATION CHARACTERIZES MANY OF THE IMPACTS OF THE PROJECT

Even though the EPA had properly identified the “secondary effects” of mischaracterized severity and extent, it included limits which do even require mitigation (i.e., EPA’s own valuation document) in three types what it terms “Indirect/Secondary Impacts” for which no mitigation is called for. In order of their significance, they are “Groundwater Drawdowns” in the Surface Downstream of the Mine, “Lost Functions” to the waters upstream, which mischaracterizes the effects of mining on water resources (which are not part of the discharge in any event); (b) mischaracterizes effects non-downgradient being accounted for and addressed through compensatory mitigation; that loss of waters upgradient of the project, and (c) being addressed through compensation mitigation of impact discussed.

Groundwater Drawdowns

The levels that can be expected to occur in groundwater levels in the regional underlying the Project, particularly active mining operations, will be downwards. claims that this groundwater drawdown will result in the

“...dramatic and persistent changes in hydrology, driven by groundwaters regimes, driven by hydrology,” part of David’s Creek, and the lower reaches of Creek, that will reduce streamflows, increase water temperatures spawning, rearing and migration, other critical life history requirements, and wildlife resources,”

and that it

“...will add to a baseline trend of decreasing groundwater, particularly in streams and wetlands along Cienega Creek with potential adverse impacts to over 30 threatened and endangered aquatic habitat dependent plants, fish and

EPA’s characterization considerably exaggerates the potential and cannot be reconciled with the conclusions reached by the EPA.

- 1) “[w]ith respect to the drawdown of the regional aquifer available suggests that it is unlikely that flows in the region on a significant portion of the mine site

For perspective on the statement, Empire Gulch is approximately 5 miles from Mattie Canyon, is approximately 10 miles due east of the Project site, Project site, and Cienega Creek, which drains from the Empire area approximately 13 miles before reaching the Colorado River.

EPA의 Evaluation of Rosemont Mine Compensation Mitigation
 December 2012

편□η

- 2) even if a connection between the regional aquifer and Davidsons models shows a drawdown at the confluence of Cienega Creek and 150 years, and only 10% of that drawdown occurs over 1,200 years
- 3) such small levels "are beyond the reasonable capability of the model to predict" and "not suggestive of likely changes" in the reduction of surface flow "even assuming that the springs and underflow in Davidson's regional aquifer"

On page 15, the following note discusses uncertainties associated with groundwater:

"The models used to predict drawdowns have uncertainty levels that must be considered when interpreting the results. While the groundwater drawdowns to thousands of feet in the field are meaningless. The models were designed for the purpose of groundwater to predict the general drawdown that would occur in an aquifer; however, the farther the predictions go into the mine, the less certain they are. Experts contracted by the Forest Service determined certainty levels for the models. The 5 to 10 foot drawdowns to contour, the groundwater models would be able to reasonably predict streams. Drawdown changes are beyond the capabilities of the models."

Further, on page 15, there is a discussion regarding temporal and spatial variability:

"[A] common opinion among experts is that groundwater has the ability to move quickly from one place to another, and such is the case with Cienega Creek and Davidson Canyon where these impacts of groundwater changes are remote periods in the future (hundreds of years)."

The study concluded that in its three different groundwater models which were subjected to peer review, the best scientific data available, assumptions and with no scientific backing, that surface drawdowns in Davidson and Canyon and Cienega Creek are even the best modeling with about probable probability. These statements are not supported by the thorough technical analysis and they are simply speculation.

Reductions in Surface Water Flow Downstream of the Mine

The EPA's Evaluation of Rosemont Mine Compensation Mitigation reduction in flow at the confluence of Cienega Creek and Davidson is that "a signal that impacts the surface water flow" are given the confluence" into the lower reaches of Cienega Creek, and given the cumulative effects of predicted reductions in groundwater flow. Again, this is simply unsupported by the study and analysis. The FEIS contains an extensive mitigation hope that the surface flows in perennial streams like Cienega Creek are the principal

EPA's Evaluation of Rosemont Mine Compensation Mitigation
 December 2012

pageNum

contributor to perennial stream flows in the project area. This is consistent with the FEIS which flags the same uncertainty regarding the connection between the mine and the stream flow connection with the discussion of the potential water sources, the streamflow prediction models, and the impact of the mine on the stream.

"While the analysis of the redump drawdown indicates that the drawdown is predicted from relatively small amounts of water, it is uncertain if the drawdown is from surface runoff or groundwater. The foot, occurring decades, hundreds, or even thousands of years, are beyond the ability of the groundwater models, or many predictions provided by the detailed predictions were modeled; however, this is not meant to inform the decision making process, but rather to highlight the model predictions where they occur as modeled; the however, the factors.

In addition, page 525 of the FEIS states that "[t]here are other trends and factors in the watershed that predict uncertainty in predicting the impact of the operations, only one of several contributing factors.

Against that background, the drawdown is described as the lowest estimates of drawdown" produced by the models "would change the gauntlet "even to 1,000 years after closure," and that the "the highest estimates of the perennial nature of the stream up through 50 years after becoming intermittent after closure and would become ephemeral in 1 closure." It may tempt EPA to seize priority, but the worst longest time period may be the future, which is hardly a legitimate basis on which to challenge the thorough analysis performed during the page 539.

It is important when discussing possible impacts to the Lower Davidson in the physical setting of the project, located approximately 13 miles from the Project. The Davidson is modeled flow reduction in the project area (14.4 miles from the project) above Cienega Creek with Cienega Creek estimated to be at its confluence with Cienega Creek, Davidson Canyon, 51.3 square miles of drainage while the entire Cienega Creek area is 51.3 square miles. Mean annual flow for the Davidson is 11% of the drainage area, which is approximately 7.2 cubic feet per second. This is based on the data available, which shows that the change in flow from the dam has been shown to be indiscernible from background flow between Cienega Creek and Cienega Creek. It is asserted, based on data from the project, that the flow does not likely extend beyond the confluence of the Davidson and Cienega Creek" data supported by contradicted by flow modeling, numerous investigations provided by Rosemont permit holders and community members.

In the FEIS goes to describe the potential predictions in flow and the reality, flows from the project site would need to move downstream through ephemeral stream channel (pocket) of highly transmissive those flows would contribute to recharge to lower Davidson Canyon. The flows from the tributaries, although negligible, could contribute to events, contribution from Barr would occur, page 355).

Lost Functions to Waters Upstream of Mine

EPA's Evaluation of Rosemont Mine Compensation Mitigation December 2012

10

The PA evaluation claims that there will be secondary impacts to the environment that include severing connectivity, decreasing quality of wildlife fragmentation of animal movement corridors, and that these impacts have been quantified and ultimately EPA has decided to proceed with the project despite the fact that the ephemeral washes that exist above the operation area are not overlooked as they are already been quantified and included in the planning process. Moreover, EPA preferred alternative for the project was selected as a result of the alternatives analysis which included consideration of the environmental impacts. Environmentally Damaging Practical Alternatives were identified in the process via EPA were chosen to insure that many (including Maggies Creek) possible remain open, connected, flowing, and that the impacts to many particular minimized.

???

~~ROSEMONT'S PROPOSED MITIGATION PROPOSAL WILL, WHEN FINALIZED, COMPENSATE FOR ALL UNAVOIDABLE IMPACTS TO WATERS OF THE UNITED STATES FROM ROSEMONT'S PROPOSED DISCHARGE~~

Rosemont's 2024 investigation proposal

- 웹□η A 웹□η potential 웹□η fee 웹□η(ILF) 웹□η project 웹□η Pantano 웹□η Dam, 웹□η feasible 웹□η in-holding 웹□η in 웹□η the 웹□η Cienega 웹□η Creek 웹□η Natural 웹□η Water 웹□η Present 웹□η indicated 웹□η on, 웹□η as accompanying 웹□η 122 웹□η fact 웹□η hyper 웹□η Hannum 웹□η(AFA) 웹□η of 웹□η senior 웹□η surface 웹□η water 웹□η associated 웹□η with 웹□η the 웹□η parcels.
 - 웹□η A 웹□η permit responsible 웹□η owner 웹□η(ILF) 웹□η project 웹□η area 웹□η \$100,000 웹□η acre 웹□η Ranch which 웹□η comes 웹□η with 웹□η its 웹□η own 웹□η 590 웹□η AFA 웹□η surface 웹□η water 웹□η right 웹□η an and 웹□η enhancement 웹□η
 - 웹□η Conservation 웹□η parcels 웹□η within 웹□η the 웹□η Davidson 웹□η Canyon 웹□η Water 웹□η pad 웹□η halong 웹□η corridors 웹□η along 웹□η Canyon 웹□η and 웹□η two 웹□η tributaries 웹□η (Mulberry 웹□η and 웹□η Barrel 웹□η the 웹□η “Davidson 웹□η Canyon” 웹□η parcels)

The 꿈□η project is 꿈□ηabor 꿈□ηpart 꿈□ηof 꿈□ηa 꿈□ηpackage 꿈□ηmitigation 꿈□ηplan with 꿈□ηfinal 꿈□ηthe 꿈□η
Mine 꿈□η 꿈□ηplan of 꿈□η 꿈□η(MAP) 꿈□η 꿈□ηThese 꿈□η mitigation 꿈□ηdescriptions 꿈□ηare 꿈□ηappendix 꿈□η 꿈□η 꿈□η 꿈□η
This 꿈□η broader 꿈□η package 꿈□η effects 꿈□ηto 꿈□η minimize 꿈□ηand 꿈□η offset 꿈□η impacts 꿈□ηto 꿈□η 꿈□η 꿈□η
for 꿈□η example, 꿈□η endanger 꿈□ηwildlife 꿈□ηeffects 꿈□ηthan

In selecting the proposed mitigation project, the cognizant of the mitigation approaches preferred mitigation measures and/or (3) Permittee responsible for even though there no current mitigation approved banks available to the Rosemont entities involved the next appears, if ILF sponsoring entities and Corps staff have been working to develop mitigation. However, at this juncture this is not an anticipated ILF proposed mitigation project.

EPA's Evaluation of Rosemont Mine Compensation Mitigation December 2013

10

upon 편□ηfor 편□ηmitigation 편□ηproject 편□ηnot yet implemented, 편□ηMontgomery 편□ηneed 편□ηcomplete a committee 편□ηpossible plan 편□η

Development of Rosemont's 404 mitigation proposal

Rosemont 쎔arrived 쎔part 쎔the mitigation 쎔process 쎔through 쎔a series 쎔of sequential 쎔steps 쎔that were 쎔based 쎔on the larger mitigation package development. 쎔Recognizing that the watershed was part of the larger mitigation package development, the Rosemont Project sought to mitigate impacts by the barrel Canyon which lies within the Davidson Canyon watershed, which is part of the Cienega tributary to the the Rosemont Project's main channel. A figure shows the major tributaries to the Cienega Creek watershed where the public (federal, state, or county) and private landowners have available to them to acquire their land for preservation. Mulberry and Davidson Canyon and the proposed part of the mitigation package. Due to their relatively undisturbed condition (limited grazing), it is proposed primarily for preservation purposes. Again, given the predominance of public lands, mitigation opportunities other than the barrel Canyon/Davidson Canyon watershed shed light on the Project.

An opportunity arose when Cienega Creek was associated with the Palmer Lake (Colorado), which was surrounded by the Cienega Creek Natural Preserve. This diversion of water for golf course irrigation has been a long-standing interest of the County, which has been acquiring rights to this water to preserve the creek. While out facts and figures (Rosamont et al., 1996) generally support the opportunity from Southern Arizona's water system, the ultimate discharge of the creek downstream of the Cienega Creek Gate is non-navigable.

In 1999, the Rosemont Mine adjacent to the Santa Cruz River purchased the property, which includes approximately 1,200 acres of land appurtenant to the water rights of the Santa Cruz Creek between Soledad and Patagonia, and Santa Cruz, Colorado. Ultimately, the mine discharges upstream of the Arizona Game and Fish Department's sensitive wildlife and fish species due to the presence of significant water rights (over 590 Acre Feet) in the area. The mine has last mile link between the Santa Mountains.

However, Rosemont believes that mitigation is the best way to address water rights issues. They have proposed a mitigation plan that includes the following: 1) Purchase of water rights from local farmers; 2) Construction of a diversion facility to divert water from the Gila River; 3) Construction of a reservoir to store water; 4) Construction of a pipeline to transport water to the project area; 5) Implementation of conservation measures to reduce water usage; 6) Payment of compensation to local farmers for lost water rights.

**EPA의 Evaluation of the Rosemont Mine Compensation Mitigation
December 2012**

캡 □ 허

In 캡 □ 허 event at the Pantano Dam project will not fully mitigate the Rosemont Project, which offers considerable mitigation measures, neither of which would provide substantial ecological benefit. The proposed Davidaic Canyon parcels are also part of the preserve needed.

Despite EPA's assertions that these add-on parcels are valuable opportunities for Clean Air, they are not to mine operations and represent the best mitigation option.

Sufficiency of mitigation offered.

After having applied the Corps' South Pacific Division (SPD) standard, Rosemont believes that the Pantano potentially non-parcels are not sufficient to mitigate the SPD developed under the regional, standardized process to determine compensatory mitigation ratios. Rules (33 CFR Part 332) indicate that this was done in response to mitigation across Corps districts and project managers. Standard Operating Procedure (SOP) for Rat December 19, 2012 followed by subsequent updates, provides procedures for insuring project managers to complete steps through the SPD Mitigation Ratio Setting Checklist, which compares proposed mitigation plan (e.g., no washes, temporal loss, etc.) to the impacts, producing a final mitigation ratio for each proposed mitigation.

The initial step is to establish a ratio comparison between the Corps' functions and values present at the Pantano sites. The functional assessment available for Arizona for general washes, so this is required.

Per Corps direction, Rosemont utilized the Rapid Stream Riparian Assessment functions projected to mitigation ratios at sites to inform the establishment ratios for the RSRA model had been developed for wetter Rosemont Project proposed changes. The site-specific modifications were made to the bedrock modification systems.

To understand Rosemont's proposed preliminary mitigation ratio components of the Sonoita Creek Ranch parcel, the Davidsc understand the Corps and the IILF sponsor are completing an assessment associated with the Pantano Dam project.

In making their ratio determination, the Corps was informed by the assessment has well as the IILF for the SPD Mitigation Ratio Sett which provided examples of completed mitigation very similar to the mitigation package permitted responsible mitigation. The 4:1 to 6.1:1 for preservation of wetlands and waters of the upland buffer at the Pantano Dam project, the IILF proposed habitat.

EPA의 Evaluation of Rosemont Mine Compensation Mitigation
 December 2012

웹□η

Thus, singe national assessment and working together through the three projects would have available credits for substantial mitigation and indirect impacts. Corps is requiring NRCC to standardize its use of SOPs and the functional assessment to determine appropriate measures taken at the direction of the Corps. Following the current process, the Corps will provide the best direction available in its approved standardized information agency assessment; and the Corps will standardize the application of permits across the South Pacific Division. The Corps has used its over which functional assessments to develop ratios which be used to determine mitigation ratios, it should address those concerns. It may take some time to secure a permit if it attempts to undermine the applicant's attempts to secure a permit per

In summary, mitigation available on each site

Pantano Dam Rosemont's proposal was to release water currently into the bed of what is now Pantano Water. The dam now (ephemeral) immediately below the dam releases water into the Pantano River. Rosemont understands that the county has been working more detailed result in enhancement areas and preserves the river in the Preserve so obtain additional credits. In discussions, or should be significant and may become part of the mitigation plan.

Sonoita Creek Ranch This is working towards Mitigation and Monitoring (HMMP) for the Allier version proposed mitigation site. It included significant enhancement of jurisdictional waters, riparian buffer and preservation of wetlands. Most of the acres located in the floodplain of Sonoita crosses approximately 590 feet each year. Given that the project is now in its second year, asserts that this is feasible. This particular land is necessary after considering the dam project. In addition, it proves that unworkable, SCR could meet all of Rosemont's compensatory mitigation

Davidson Canyon Reservation Land Through these lands are similar to acres of mitigation land in a category. This simply adds weight to that mitigation proposal. Rosemont believes it can meet requirements

In summary, some combination of these projects will meet Rosemont's obligations. These are the best and indeed most appropriate purposes in proximity to the unique riparian restoration opportunities very little surface water available

V. Conclusion

Rosemont remains committed to meeting and maintaining compliance with the Project, and the tanks to the individual projects. Mitigation planning, execution, and agency oversight. The relevant standards also applied, measured, and judged on their true merit. Potential changes to meet the individual regulatory requirements that have measures that manager use the best science available to what could happen in hundreds of

EPA의 Evaluation of the Rosemont Mine Compensation Mitigation
December 2013

chemin

the full letter

The statements made in the letter to the agency guidelines or the agency requirements, which appropriately exaggerating the impact of the Project without the consideration of the condition: Opinion of the conservation areas and mitigation measures documents available to the project understanding of the analysis and discussions.

Rosemont looks forward to next week when we give us the opportunity to visit the Project briefing regarding the site would give the context regarding the project, the overall setting of the area, the proposed mitigation sites, and the proximity of the specific areas referenced continuous work plan staff schedule this visit.

chemin

Regards,

chemin

chemin

chemin

chemin

Katherine Ann Anderson

Vice-President, Environmental and Regulatory Affairs

chemin

chemin

chemin

Attachment: Figure 1: Surface Management

chemin

chemin

cc: Marjorie Blaine, U.S. Army Corps of Engineers

Jared Shifeld, U.S. EPA Region IX

Jim Upchurch, U.S. Forest Service

Henry Darwin, Arizona Department of Environmental Quality

Mike Fulton, Arizona Department of Environmental Quality

David Baker, Bureau of Land Management

Steven Spangle, U.S. Fish and Wildlife Service

chemin

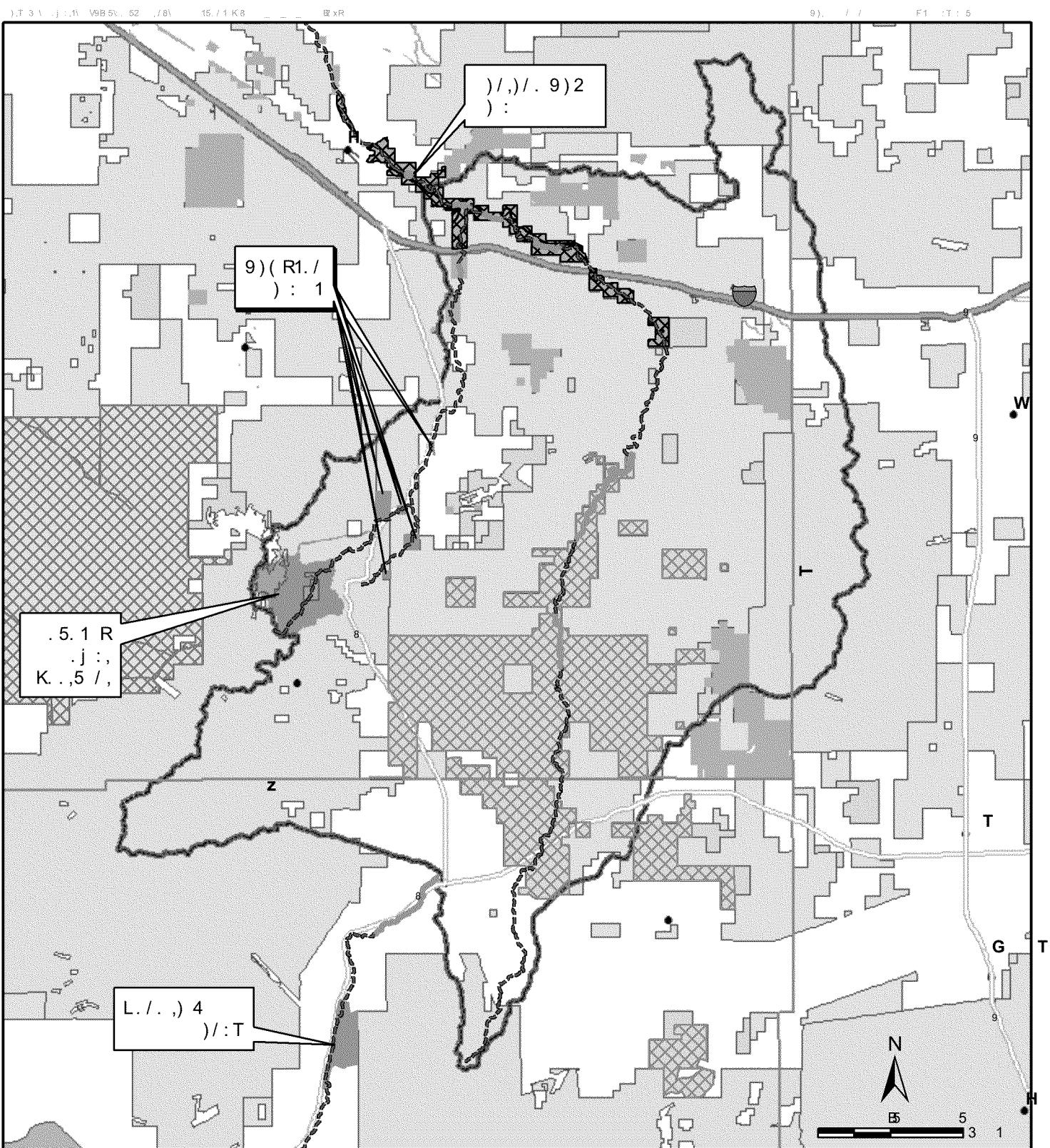
chemin

chemin

chemin

chemin

Doc. No. 130005738-00013



9) . L. : W 3 2) 4. / ,
L AW 1 9),)
A, 8), RM), 1T RL 22)
. 1 2 . / , 4. 55


WestLand Resources, Inc.
Tucson • Phoenix • Flagstaff
4001 E. Paradise Falls Drive (520) 206-9585
Tucson, Arizona 85712

— / / L, 2) : T
— — 5T 2) 9) / 8 4T //
. 5. 1 R . j : , K . , 5 / ,
3 , 8 , / L ,
4AC N 4 KC DF I L
I L 4AC N LC DEC 14ECL DEC
L CD AD X & CD I CN
4 / 8) 4 M , 1T R(FNLN)

FL K. 1, L (: (FLKL)
2) 4. / ,
W) . 01) / R3) / 8 2 / ,(W 3)
3 .)
O . /)) L (: (C L)
(. , 1) / R(C. 4 . .)
(. , D 1, 1) / R
(. , M R 0)

EL 3 ECD
4E 4EB
LF K 4 3 C N 3 CD
K8